

## NAMING IONIC COMPOUNDS

Ionic compounds are composed of positive ions (usually a metal), and negative ions (usually a non-metal).

When naming compounds, the following rules must be applied:

1. The most metallic element (positive ion) is written first and its name remains the same.
2. The non-metal (negative ion) is written second and its ending is changed to “ide”.

For example:  $\text{KBr}$  Potassium Bromide

3. Any polyatomic ion (radical group), for example  $\text{SO}_4$ ,  $\text{CO}_3$ , that behaves as a metal or a non-metal, never has its name changed. All polyatomic ions have special names assigned to them.

For example:  $\text{K}_2\text{SO}_4$  Potassium Sulphate

4. Roman numerals will need to be used if there is a multivalent metal present (a metal with more than one combining capacity). For example, Nickel +2, +3 and Lead +2, +4. The roman numerals are included in the name of the compound and are written in brackets beside the metallic element.

For example:  $\text{Pb}(\text{NO}_3)_2$  Lead (II) Nitrate

### IMPORTANT THINGS TO REMEMBER:

- A name can only have 2 words (for our purposes in this course)
- If there are more than 2 elements present in the formula, this indicates the presence of a polyatomic ion.